

PROCEEDINGS
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FIVE NEW WESTERN GEOPHILID CHILOPODS

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The types of the new geophilid chilopods diagnosed in the present paper are for the present retained in the author's extensive collection of chilopods from the western United States at the University of Utah.

DIGNATHODONTIDAE

Damothus new genus

Body narrowed both cephalad and caudad. Head small, lacking a frontal suture. Antennae short. Labrum with median piece very large as in *Linotaenia*, its free margin dentate throughout. First maxillae without lappets.

Prehensors lacking sclerotic lines; the claws when closed not attaining the anterior margin of the head; claws each armed at base with two stout teeth or serratures.

Ventral pores absent.

Last ventral plate wide. Coxal pores partly covered by this plate, few in number.

Anal pores present.

Telopodite of anal legs composed of six articles; claw normally developed.

Type species: Damothus montis new species.

Most readily distinguished from *Linotaenia* in having at the base of each claw of the prehensors two stout teeth in place of the single one present in the latter genus.

Damothus montis new species

Median piece of labrum very large, its free margin bearing close-set conical teeth throughout its length. First maxillae with the palpus large and biarticulate. Claws of the second maxillae large and smooth.

Prehensors small; claws slender, when closed not attaining front margin of head. Each tooth at base of claw accompanied by a stout seta in line with similar setae on the preceding articles.

Sternites lacking pores; clothed over entire surface with evenly spaced erect setae.



Last ventral plate trapeziform. Coxal pores in the holotype numbering five on each side, these mostly covered by the sternite.

Anal pores present, small.

Legs in the male evenly crassate, the articles between coxa and second tarsal nearly cylindrical in form; clothed throughout with long setae; ending in a well-developed claw.

Pairs of legs: 37 (39).

Length: 12 mm.

Locality: UTAH: Wahsatch Mountains at Brighton. Type taken 19 November 1939.

***Zantaenia* new genus**

Body in general form like that of typical *Linotaenia*, with head proportionately small.

Head with frontal suture distinct. The median piece of the labrum bearing distinct serratures or teeth on its free margin, its ends resting directly on the fulcra, apparently with no intervening lateral pieces. Palpi of first maxillae biarticulate.

Prehensors lacking evident sclerotic lines; claws slender, neither they nor other articles with teeth.

Tergites not sulcate; last intertergite separated from the pleurite on each side by a distinct suture.

Last ventral plate narrow. Coxal pores on each side small and numerous, distributed over most of the surface.

Anal pores present.

Anal legs with claw present in the female but lacking in the male.

Type species: *Zantaenia idahona* new species.

Differing from *Agathothus*, which it resembles in the form of the prehensors, in having the free margin of the labrum bearing large serratures and teeth in place of a fringe of setae and in having the last ventral plate narrow and the coxal pores numerous and found over the entire surface instead of having this plate broad with the coxal pores few and aggregated near the margin of the sternite.

***Zantaenia idahona* new species**

Clypeus with a transverse series of four stout setae such as usual in *Linotaenia*. Middle piece of labrum very wide with its ends abutting directly on the fulcra; median piece with large serratures laterally and dentiform processes over the middle portion, these close-set. First maxillae and their palpi, large, distally pointed, and biarticulate. Claws of second maxillae small, much surpassed in length by the adjacent setae which form a dense brush on the terminal article; fewer setae on the penult article; coxae fully coalesced.

Tergites smooth and glabrous, not sulcate. Last intertergite separated from the pleurites.

Spiracles all round, the first scarcely larger than the second.

Sternites with a median longitudinal sulcus which is widened and deepened at its middle.

Last ventral plate narrow and elongate, its sides converging caudad. Coxal pores small and numerous, opening over entire surface.

Anal pores large.

Last legs not exceeding the penult in length; claw present in female but absent in male.

Pairs of legs: 51 (♂), 55 (♀).

Length: 45 mm.

Locality: IDAHO: Wallace, 3 September 1949. S. Mulaik, collector.

PACHYMERINIDAE

Pachymerium idium new species

Two clypeal areas present but these not sharply defined in that their component polygonal units grade into the ordinary ones at their periphery, the two areas contiguous at middle line; a stout seta at middle of each area, with two setae in front of the combined areas and a transverse series of 3 or 4 setae on each side of them; farther back on clypeus another transverse series of setae.

Lateral pieces of labrum extending in front of middle piece but not meeting at middle; middle piece bearing a series of teeth, the lateral pieces bearing setae or pectinate. A large, distally acuminate lappet arising from coxosternum on each side.

Prehensors stout; the prosternum relatively long, without sclerotic lines; claws when closed much surpassing the anterior margin of head; unarmed with teeth.

Spiracles all circular. Sternites with no pores evident.

Last sternite very wide, trapeziform, its sides convex and the caudal margin moderately incurved. Coxal pores four on each side.

Anal pores large.

Anal legs not exceeding the penult in length, not specially thickened, bearing a well-developed claw.

Pairs of legs: 65.

Length: 25 mm.

Locality: CALIFORNIA: Marin Co., 1½ mi north of Dillon Beach.

The single type was taken 26 July 1960, "in the upper zone in a fissure in rock" kept moist by spray but not covered at high tide. The specimen was kindly transmitted by J. W. Hedgpeth, Director of the Pacific Marine Station.

SCHENDYLIDAE

Gosendyla new genus

Labrum in form of an obtuse, apically somewhat rounded reentrant angle, the middle portion bearing a series of numerous stout conical teeth. First maxillae without lappets. Coxae of second maxillae united at middle and without median sulcus; claw of palpus closely pectinate on both margins.

Ventral pores absent.

Coxal pores small and numerous.

Anal pores present.

Type species: Gosendyla socarnia new species.

Close to the Guatemalan *Sogolabis* in the presence of anal pores and the numerous coxal pores, but differing in having the claws of the second maxillae bipectinate instead of smooth.

***Gosendyla socarnia* new species**

Head as wide as long, the sides convex, the anterior margin obtusely rounded and the caudal margin weakly convex. Antennae long, with the terminal article as long as, or a little longer than, the two preceding articles taken together.

Labrum forming an obtuse reentrant angle with the deeper middle portion strongly armed with teeth which in middle portion are conical but laterally become distally rounded and somewhat creniform; beyond the dentate series on each side the labral margin wholly smooth. Coxae of second maxillae broadly united at middle but anteriorly showing a pale median line; anterior margin of coxosternum showing a small reentrant angle at middle; claw of palpus long, closely pectinate on both margins.

Prehensors with claw and other parts wholly unarmed; claws when closed attaining anterior margin of head; no sclerotic lines evident.

Sternites with a median longitudinal sulcus; with no pores.

Last ventral plate somewhat shield-shaped, caudally widely rounded. Coxopleurae inflated making the last pediferous segment notably wider transversely than the preceding segment or two; pores small and numerous, subseriately arranged.

Anal pores present.

Last legs with telopodite six-jointed; in male strongly inflated; claw absent; clothed throughout with very short setae.

Pairs of legs: 49.

Length: 20 mm.

Locality: UTAH: Dry Canyon, near University of Utah campus.

***Zygona* new genus**

Labrum nearly straight transversely, but noticeably incurved at middle; median portion dentate; lateral margins smooth. First maxillae with a specialized, distally somewhat fimbriate lappet from coxosternum on each side. Second maxilla with claw of palpus well developed and smooth.

Prehensors with prosternum and other articles lacking teeth; claws when closed surpassing anterior margin of head.

Tergites bisulcate.

Last sternite broad. Coxal glands composite, opening through two pores on each side.

Anal pores present.

Anal legs with telopodite composed of six articles; claw well developed.

Type species: Zygona duplex new species.

Distinguished especially by the composite coxal glands.

***Zygona duplex* new species**

Body with dorsum showing a dark geminate stripe, this more distinct posteriorly than anteriorly.

Head much longer than wide (17:11). Antennae long, the last article much shorter than the two preceding taken together.

Prebasal plate exposed.

Clypeus bearing numerous well-spaced setae over entire surface. Labrum over middle portion bearing a nearly straight series of stout teeth, the lateral margins smooth. First maxillae with coxae fused; palpus thick, biarticulate, the terminal article rounded and bearing long setae, with similar setae at distal end of penult article; at base of palpus arising from coxa a peculiar lappet bearing at distal end a series of setae directed mesad, fimbriate. Second maxillae with claws entirely smooth; all joints bearing numerous long setae, the second bearing on its outer side toward distal end a stout spine.

Tergites smooth, bisulcate. Sternites with a median longitudinal sulcus, lacking pores. Spiracles all circular, the first scarcely enlarged.

Last ventral plate broadly trapeziform. Coxal glands composite, the simple glands aggregated into two groups and opening through two pores on each side.

Anal pores present.

Anal legs longer and thicker than the penult but not crassate.

Pairs of legs: 53.

Length: 33 mm.

Locality: ARIZONA: Santa Rita Mountains, Madison Canyon. Holotype taken 10 September 1941.

